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* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page for STN Seminar Schedule - N. America
 NEWS  2  AUG 10  Time limit for inactive STN sessions doubles to 40
                  minutes
 NEWS  3  AUG 18  COMPENDEX indexing changed for the Corporate Source
                  (CS) field
 NEWS  4  AUG 24  ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
 NEWS  5  AUG 24  CA/CAplus enhanced with legal status information for
                  U.S. patents
 NEWS  6  SEP 09  50 Millionth Unique Chemical Substance Recorded in
                  CAS REGISTRY
 NEWS  7  SEP 11  WPIDS, WPINDEX, and WPIX now include Japanese FTERM
                  thesaurus
 NEWS  8  OCT 21  Derwent World Patents Index Coverage of Indian and
                  Taiwanese Content Expanded
 NEWS  9  OCT 21  Derwent World Patents Index enhanced with human
                  translated claims for Chinese Applications and
                  Utility Models
 NEWS 10  NOV 23  Addition of SCAN format to selected STN databases
 NEWS 11  NOV 23  Annual Reload of IFI Databases
 NEWS 12  DEC 01  FRFULL Content and Search Enhancements
 NEWS 13  DEC 01  DGENE, USGENE, and PCTGEN: new percent identity
                  feature for sorting BLAST answer sets

 NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
              AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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FILE LAST UPDATED: 30 Nov 2009 (20091130/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

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substance identification.

```
=> s bifunctional
L1       24724 BIFUNCTIONAL

=> s polyethylene glycol
         418702 POLYETHYLENE
         430460 GLYCOL
L2       128161 POLYETHYLENE GLYCOL
                  (POLYETHYLENE(W)GLYCOL)

=> s spacer
L3       66298 SPACER

=> s l1 and l2 and l3
L4           16 L1 AND L2 AND L3

=> s l4 not py > 2003
       8121830 PY > 2003
L5           4 L4 NOT PY > 2003

=> d l5 ibib abd 1-
'ABD' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

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ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS
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IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

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=> d l5 ibib abs 1-
YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y

L5   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:        1999:34469  CAPLUS
DOCUMENT NUMBER:         130:121158
TITLE:                   Preparation of artificial collagen and its application
                         for wound closing and healing
INVENTOR(S):             St. Pierre, Serge; Brodniewicz, Teresa
PATENT ASSIGNEE(S):      Haemacure Corporation, Can.
SOURCE:                  U.S., 8 pp.
                         CODEN: USXXAM
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
     US 5856308           A     19990105    US 1996-721434         19960927
PRIORITY APPLN. INFO.:                      US 1996-721434         19960927
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB   The invention provides artificial collagen comprising a stabilized ordered
     triple helix of copolypeptide strands containing repeating amino acid triads
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each strand covalently linked via the C-terminal end thereof to a common template optionally via a spacer for stabilization of the helical secondary structure. A polymer is included to increase the mol. weight of the mimic, and/or to vary other properties of the mimic such as hydrophilicity, immunogenicity, and in vivo stability. The collagen may be modified with groups which improve its phys. or chemical properties for the intended use, such as adhesive and crosslinking groups. The general formula for the artificial collagen is: (polymer)w·{[(Xaa-Xbb-Gly)-(Xaa-Xbb-Gly)n-(Xaa-Xbb-Gly)-(spacer)x]3-(template)-(AM)y}, wherein Xaa and Xbb are each a hydrophilic or netral residue of a naturally occurring amino acid or homolog thereof; template is a stabilizing moiety containing at least three functional groups each reacted with the C-terminal end of one polypeptide strand and capable of stabilizing the triple-helix; polymer is a polymer from .apprx.200 to 100,000 daltons covalently linked at at least one end thereof to functional amino acid side chains; AM is an adhesive moiety; spacer is a bifunctional linear mol. covalently linked to the C-terminal end of each polypeptide strand and to the template. Artificial collagen according to the invention is particularly useful as a wound closer and healer.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:7495 CAPLUS

DOCUMENT NUMBER: 128:119581

ORIGINAL REFERENCE NO.: 128:23347a,23350a

TITLE: Effect of crosslinking agents on poly(ethyl methacrylate) bone cements

AUTHOR(S): Deb, S.; Braden, M.; Bonfield, W.

CORPORATE SOURCE: King's College, Dental Inst., London, SE5 9RW, UK

SOURCE: Journal of Materials Science: Materials in Medicine (1997), 8(12), 829-833
CODEN: JSMMEL; ISSN: 0957-4530

PUBLISHER: Chapman & Hall

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Aseptic loosening of cemented joint prostheses in may cases is related to the mech. failure of the acrylic bone cement. Poly(Me methacrylate) bone cements are widely used in orthopedic surgery although there are well-known disadvantages. A lower modulus bone cement based on poly(Et methacrylate-n-butylmethacrylate) with a lower polymerization exotherm, and a low monomer extractability, is a promising alternative. The effect of incorporating crosslinking agents in order to improve the mech. performance of the PEMA bone cement is reported. Three different bifunctional dimethacrylate crosslinking agents with different chain lengths and degrees of flexibility were incorporated in the monomer phase, and cements formulated. The setting time decreased in the presence of the crosslinking agents and the polymerization exotherm decreased in the presence of triethylene glycol dimethacrylate and polyethylene glycol dimethacrylate (n = 400). Incorporation of triethylene glycol dimethacrylate showed an increase in the tensile strength and modulus with a decrease in the strain at maximum stress. However, polyethylene glycol dimethacrylate (n = 400), did not improve the mech. properties appreciably which may be attributed to the low crosslinking d. and higher flexibility of the spacer group in the crosslinking agent.

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:444747 CAPLUS
DOCUMENT NUMBER: 127:162226
ORIGINAL REFERENCE NO.: 127:31455a,31458a
TITLE: Immobilization of potentially bioactive moieties onto polyether with poly(ethylene glycol)-sulfonate spacer
AUTHOR(S): Ji, Jian; Feng, Linxian; Qiu, Yongxin; Yu, Xiaojie; Yang, Shilin
CORPORATE SOURCE: Department of Polymer Science and Engineering, Zhejiang University, Hangzhou, 310027, Peop. Rep. China
SOURCE: Chinese Journal of Polymer Science (1997), 15(2), 180-186
CODEN: CJPSEG; ISSN: 0256-7679
PUBLISHER: Science Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A new reactive graft copolymer, polytetramethylene glycol-graft-ω-Pr sodium sulfonate-poly(ethylene glycol) (PTMG-g-PEG-CH2CH2CH2SO3-Na+), was synthesized by the cationic polymerization of α,ω-bifunctional PEG macromonomer (R-PEG-CH2CH2CH2SO3Na; R = 2-tetrahydrofurfuryl) and THF. The obtained copolymer exhibits the expected structure as indicated by the results of characterization. Two amino acids (L-arginine, L-tyrosine) were covalently attached to the copolymer after converting the sulfonate group to sulfonyl chloride. So the new reactive graft copolymer (PTMG-g-PEG-CH2CH2CH2SO-3Na+) is expected to be very useful in the attachment of potentially bioactive moieties to polymers via a hydrophilic PEG spacer.

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1989:502661 CAPLUS
DOCUMENT NUMBER: 111:102661
ORIGINAL REFERENCE NO.: 111:17171a,17174a
TITLE: Development of coupling agent with long-chain hydrophilic spacer. Application to protein modification
AUTHOR(S): Nagae, S.; Matsuda, T.; Akutsu, T.
CORPORATE SOURCE: Natl. Cardiovasc. Ctr., Osaka, Japan
SOURCE: Jinko Zoki (1989), 18(1), 137-40
CODEN: JNZKA7; ISSN: 0300-0818
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Coupling agents with long-chain hydrophilic spacers based on polyethylene oxide were developed. These have versatile applications such as surface modification, protein fixation on polymer surfaces and protein modification. The couplers introduced at the end of the spacer included succinimide, pentachlorophenol and imidazole. The resultant activated ester reacted with primary amino group of proteins resulting in an increase in mol. weight SOD (Superoxide dismutase) modified gave a prolonged half-life in rat blood. The bifunctional coupler is more efficient for increasing the mol. weight and preservation of enzymic activity than monofunctional counterparts.

=> s l2 and spacer
66298 SPACER
L6 525 L2 AND SPACER

=> s l6 and solid phase
1234898 SOLID

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       2045222 PHASE
        122580 SOLID PHASE
                  (SOLID(W)PHASE)
L7          30 L6 AND SOLID PHASE

=> s l7 not py > 2003
       8121830 PY > 2003
L8          13 L7 NOT PY > 2003

=> d l8 ibib abs 1-
YOU HAVE REQUESTED DATA FROM 13 ANSWERS - CONTINUE? Y/(N):y

L8   ANSWER 1 OF 13  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:        2003:883516  CAPLUS
DOCUMENT NUMBER:         140:198114
TITLE:                   Polyethylene glycol as a
                         spacer for solid-phase
                         enzyme immobilization
AUTHOR(S):               Manta, C.; Ferraz, N.; Betancor, L.; Antunes, G.;
                         Batista-Viera, F.; Carlsson, J.; Caldwell, K.
CORPORATE SOURCE:        Catedra de Bioquimica, Facultad de Quimica,
                         Montevideo, CC 1157, Urug.
SOURCE:                  Enzyme and Microbial Technology (2003), 33(7), 890-898
                         CODEN: EMTED2; ISSN: 0141-0229
PUBLISHER:               Elsevier Science
DOCUMENT TYPE:           Journal
LANGUAGE:                English
AB   With the aim to improve the performance of enzyme bound to hydrophilic
     solid phases, their immobilization with polyethylene
     glycol (PEG) tether have been studied.  Sweet potato
     β-amylase, which hydrolyzes the high mol. weight substrate starch and
     β-galactosidase, which acts on low mol. weight substrates, were used as
     model enzymes and beaded thiol-agarose as solid phase.
     Several two step methods for the introduction of the tether using a
     bis-oxirane homobifunctional PEG as well as a heterobifunctional derivative
     with a hydroxysuccinimide ester and a maleimide group have been evaluated.
     Amino groups, native and de novo thiol groups in the enzymes were utilized
     for immobilization.The best approach was found to be to first introduce
     the PEG derivative via one of its reactive groups to the enzyme.  Subsequently
     the formed conjugate was bound to the solid phase by
     the remaining reactive group.Attempts to first introduce the PEG tether
     into the solid phase were not successful.A high degree
     of substitution with PEG chains on the enzyme leads to high immobilization
     yields for both β-amylase and β-galactosidase, but relatively
     lower gel-bound activity for the former enzyme which is acting on a high
     mol. weight substrate and thus more sensitive for steric shielding effects.
     With optimal degree of PEG substitution (which occurred at five times
     molar excess of the heterobifunctional reagent) the gel-bound activity of
     β-amylase was increased from 12% (for the derivative without tether) to
     31%.
OS.CITING REF COUNT:     9     THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD
                               (9 CITINGS)
REFERENCE COUNT:         17    THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8   ANSWER 2 OF 13  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:        2003:425676  CAPLUS
DOCUMENT NUMBER:         140:164530
TITLE:                   Recent advances in synthesis and use of high load
                         spacer-modified supports in solid
                         phase synthesis
AUTHOR(S):               Rapp, Wolfgang
CORPORATE SOURCE:        Rapp Polymere GmbH, Tuebingen, 72072, Germany
```

SOURCE: Innovation and Perspectives in Solid Phase Synthesis & Combinatorial Libraries: Peptides, Proteins and Nucleic Acids--Small Molecule Organic Chemistry Diversity, Collected Papers, International Symposium, 7th, Southampton, United Kingdom, Sept. 18-22, 2001 (2002), Meeting Date 2001, 9-12. Editor(s): Epton, Roger. Mayflower Worldwide Ltd.: Kingswinford, UK. CODEN: 69DYT7; ISBN: 0-9515735-4-3
DOCUMENT TYPE: Conference
LANGUAGE: English

AB TentaGel resins are well established in the field of solid phase synthesis (SPS). However, their capacities are in the range of 0.3-0.5 mmol/g, and for some applications, a higher capacity of such a resin type is preferred. Thus, the short ethylene glycol spacers in the range of 5 to 10 ethylene oxide units were introduced to gel type polystyrene resins (HypoGel). For comparison, the peptide sequence GNNDESNISFKEK was synthesized on the oligo ethylene glycol modified polystyrene resin. The spacers have capacities of 0.46 and 0.69 mmol/g were achieved. The peptide obtained was with very high yield and purity and the results were the same as that of previous synthesis on TentaGel resins. This is remarkable because beside changing the capacity by a factor of 2-3 also the particle size was increased from 90 μm to 110-150 μm for the HypoGel 400 resin. The 1,1,1-(trishyroxymethyl)-ethane was introduced to the HypoGel resin to form a sym. diol. NMR investigations indicated that the glycol spacer consisting of 10 ethylene oxide units is long enough to keep the flexibility of the functional end groups high enough to get high resolution 13 C NMR from the resin.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:297427 CAPLUS
DOCUMENT NUMBER: 134:312194
TITLE: Solid-phase bonded diazonium compounds
INVENTOR(S): Dahmen, Stefan; Braese, Stefan
PATENT ASSIGNEE(S): Germany
SOURCE: Ger. Offen., 10 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19931727	A1	20010426	DE 1999-19931727	19990708

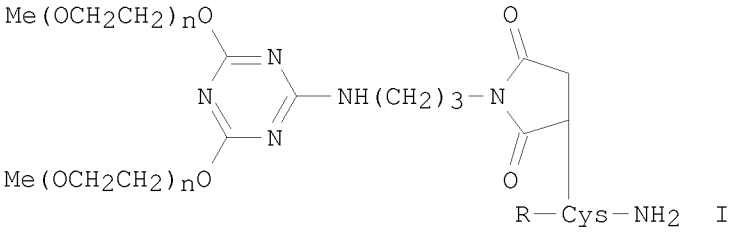
PRIORITY APPLN. INFO.: DE 1999-19931727 19990708
OTHER SOURCE(S): MARPAT 134:312194

AB The title compds., with good stability and useful as linkers or scavengers in the synthesis of potentially biol.-active compds., comprise aromatic diazonium compds. bonded via spacer groups to solid phases, e.g., (grafted) crosslinked styrene polymers, crosslinked polyacrylamide, partially-soluble polyethylene glycols, derivatized silica gel or glass. The reaction of 60 mmol NaH with 38 mmol 2-amino-5-chlorobenzyl alc. in DMF followed by reaction with 12.6 mmol chloromethylated polystyrene at 40° for 3.5 h, washing and drying of the resin, and diazotization of 0.5 g resin in THF with 1.5 mmol BF3.Et2O and 1.5 mmol tert-BuONO at room temperature gave a resin with N content 1.28%. Complexation of the diazonium salts with crown ethers and stability of the complexes are exemplified.

L8 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:464984 CAPLUS
DOCUMENT NUMBER: 133:89802
TITLE: Preparation of poly(ethylene glycol)-peptides conjugates having long-lasting effect for stimulating digestive tract motility
INVENTOR(S): Suzawa, Toshiyuki; Yamazaki, Motoo; Kishibayashi, Nobuyuki; Karasawa, Hiroshi
PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000191700	A	20000711	JP 1998-372373	19981228

PRIORITY APPLN. INFO.: JP 1998-372373 19981228
GI



I

AB Peptides having activity for stimulating digestive tract motility linked to at least one polyalkylene glycol(s) directly or through a spacer or pharmacol. acceptable salts thereof, which are useful as enhancers of digestive tract motility or remedies for disorders of digestive tract motility, are prepared Thus, motilin-Cys-NH2, i.e. H-Phe-Val-Pro-Ile-Phe-Thr-Tyr-Gly-Glu-Leu-Gln-Arg-Met-Gln-Glu-Lys-Glu-Arg-Asn-Lys-Gly-Gln-Cys-NH2 (I), was prepared by the solid phase method using solid phase peptide synthesizer PSSM-8 (Shimazu Seisakusho Ltd., Japan) and Rink amide MBHA resin and conjugated with 2,4-bis[methoxy(polyethylene glycol)]-6-[(3-maleimidopropyl)amino]-s-triazine (preparation given) to give branched polyethylene glycol-conjugated peptide derivative (II; R = H-Phe-Val-Pro-Ile-Phe-Thr-Tyr-Gly-Glu-Leu-Gln-Arg-Met-Gln-Glu-Lys-Glu-Arg-Asn-Lys-Gly-Gln-). II and the latter compound in vitro increased contractility of rabbit duodenum sample with AC50 of 1.2±0.4 and 6.9±3.3, resp.
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:41527 CAPLUS
DOCUMENT NUMBER: 132:207680
TITLE: Soluble-polymer-supported synthesis of β-lactams on a modified poly(ethylene glycol)
AUTHOR(S): Annunziata, Rita; Benaglia, Maurizio; Cinquini, Mauro; Cozzi, Franco
CORPORATE SOURCE: Centro C.N.R. and Dipartimento di Chimica Organica e

Industriale, Universita di Milano via Golgi, Milan, 19-20133, Italy
SOURCE: Chemistry--A European Journal (2000), 6(1), 133-138
CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:207680
AB A modified poly(ethylene glycol) (PEG) has been developed for the soluble-polymer-supported synthesis of β-lactams. The monomethyl ether of PEG (MeOPEG) with an average MW of 5000 was used as the support, a 4-(3-propyl)phenyl residue as the spacer, and a 4-oxyphenylamino group as the moiety with the reactive functionality. From this modified PEG representative aromatic, heteroarom., unsatd., and aliphatic imines were obtained in high yields by different procedures. The polymer-supported imines were then employed to prepare several β-lactams by enolate/imine condensation and ketene/imine cycloaddn. Examples of the control of the absolute stereochem. during the azetidinone ring formation are also reported. The reactions carried out on the polymer-bound imines showed a remarkable similarity to those performed on nonimmobilized imines, both in terms of yields and stereoselectivities. Removal of the β-lactams from the polymer has also been accomplished to directly deliver the N-unsubstituted azetidinones.
OS.CITING REF COUNT: 64 THERE ARE 64 CAPLUS RECORDS THAT CITE THIS RECORD (66 CITINGS)
REFERENCE COUNT: 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:680970 CAPLUS
DOCUMENT NUMBER: 132:94105
TITLE: Chemistry in interphases. The solid-phase synthesis of well defined rhodium and iridium phosphine complexes
AUTHOR(S): Buchele, Joachim; Mayer, Hermann A.
CORPORATE SOURCE: Institut fur Anorganische Chemie der Universitat Tubingen, Tubingen, Germany
SOURCE: Chemical Communications (Cambridge) (1999), (21), 2165-2166
CODEN: CHCOFS; ISSN: 1359-7345
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Hydroxy-terminated poly(ethylene glycol) ether complexes with tricarbonyl[1,3,5-tris(diphenylphosphino)-1,3,5-cyclohexanetrimethanol]molybdenum were subjected to Williamson ether reaction with Cl(CH2)3Si(OEt)3 to obtain tris[(triethoxy)silyl] functionalized complexes. Simultaneous condensation of the complexes with TEOS via sol-gel process led to formation of organic-inorg. hybrid polyether polysiloxane complexes. The properties of these complexes were dependent on siloxane segment content. Removal of the Mo(CO)3 group by photo-assisted oxidation, led to the 1,3,5-tris(diphenylphosphino) polyether-polysiloxane as supported tripodal phosphine ligand. The supported, non-coordinated ligand was exposed to [M(cod)Cl]2, M= Rh, Ir, in the presence of NaBPh4 to form anchored Rh and Ir coordination complexes. The flexibility of the Rh and Ir supported complexes increases with the d.p. of the poly(ethylene glycol) spacer, from 50 to 145; when d.p. is 285, chain mobility is reduced due to inter-chain interactions. The NMR shift linewidth from the supported tripodal phosphine ligand to the Rh and Ir complexes is attributed to the larger chemical shift dispersion and hindered rotation of the Ph groups.
OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:543671 CAPLUS
DOCUMENT NUMBER: 129:276300
ORIGINAL REFERENCE NO.: 129:56345a,56348a
TITLE: Cleavage and analysis of material from single resin beads
AUTHOR(S): Wells, Neil J.; Davies, Michael; Bradley, Mark
CORPORATE SOURCE: Department of Chemistry, University of Southampton, Southampton, SO17 1BJ, UK
SOURCE: Journal of Organic Chemistry (1998), 63(19), 6430-6431
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The authors report the preparation of high-loading resin beads where a single bead gives sufficient material for NMR characterization, mass spectrometer, and repeated conventional HPLC anal. Thus, chloromethyl PS resin beads (250-300 μm, 2 mmol g-1) were converted to aminomethyl resin using either potassium phthalimide or potassium bis(tert-butylimino)dicarbonate to give, after hydrazinolysis and acidolysis, aminomethyl resin with a measured amine loading of 1.03 mmol g-1. A small inert PEG spacer was then introduced to allow efficient PAMAM dendrimer synthesis. To test the synthetic utility of these high-loading PS-PEG [G 2.0] beads (polystyrene-polyethylene glycol-dendrimer generation 2.0), the peptide Fmoc-Val-Phe-Ala-OH was prepared using the standard peptide coupling conditions on the HMPB linker, which allows the peptide to be cleaved from the solid support with 1% TFA in CH2Cl2, leaving the dendrimer-resin link intact. There were approx. 34,500 beads/g in the dendrimer derivatized form, which is acceptable for split and mix library application. A small peptide library of 20 compds., H-Xaa1-20-Gly-Gly-Phe-Leu-Lys-OH, were prepared and analyzed by HPLC and ESMS. The authors have shown that a single resin bead can support the synthesis of enough peptide material for comprehensive anal., and also, have shown the utility of these beads in the preparation of a small peptide library.
OS.CITING REF COUNT: 36 THERE ARE 36 CAPLUS RECORDS THAT CITE THIS RECORD (36 CITINGS)
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:282984 CAPLUS
DOCUMENT NUMBER: 129:16371
ORIGINAL REFERENCE NO.: 129:3521a,3524a
TITLE: A Reinvestigation of the Preparation, Properties, and Applications of Aminomethyl and 4-Methylbenzhydrylamine Polystyrene Resins
AUTHOR(S): Adams, J. Howard; Cook, Ronald M.; Hudson, Derek; Jammalamadaka, Vasu; Lyttle, Matthew H.; Songster, Michael F.
CORPORATE SOURCE: Solid-Phase Sciences, San Rafael, CA, 94903, USA
SOURCE: Journal of Organic Chemistry (1998), 63(11), 3706-3716
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
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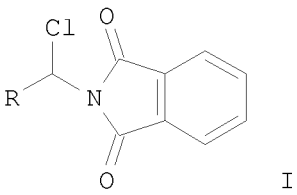

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AB Mild, efficient conditions have been developed for the preparation of 4-methylbenzhydrylamine polystyrene (MBHA) and aminomethyl polystyrene (AMPS) resins by a two-step procedure with synthons I (R = H, 4-MeC6H4). The products possess excellent swelling characteristics and acylate readily with linkers yielding useful derivs., which retain good swelling and reactivity. Comparative studies with these resins, and their poly(ethylene glycol) (PEG) derivs., yield insights into the role of spacer arm and environment effects in synthesis facilitation.

OS.CITING REF COUNT: 87 THERE ARE 87 CAPLUS RECORDS THAT CITE THIS RECORD (88 CITINGS)

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:639402 CAPLUS

DOCUMENT NUMBER: 125:301579

ORIGINAL REFERENCE NO.: 125:56459a,56462a

TITLE: Stepwise solid-phase synthesis of oligonucleotide-peptide hybrids.

AUTHOR(S): De La Torre, B. G.; Avino, A.; Albericio, F.; Eritja, R.

CORPORATE SOURCE: Department de Genetica Molecular, CID-CSIC, Barcelona, E-08034, Spain

SOURCE: Peptides 1994, Proceedings of the European Peptide Symposium, 23rd, Braga, Port., Sept. 4-10, 1994 (1995) , Meeting Date 1994, 303-304. Editor(s): Maia, Hernani L. S. ESCOM: Leiden, Neth.
CODEN: 63MBAO

DOCUMENT TYPE: Conference

LANGUAGE: English

AB Nucleopeptides were prepared by (1) peptide synthesis on a polyethylene glycol-polystyrene support using the (o-nitrophenyl)ethyl ester linker, BOC for N-terminal protection, and FMOC or Fm for sidechain protection, (2) converting the terminal NH2 group to a spacer group, and (3) assembly of several oligonucleotide sequences using phosphoramidite chemical (no synthetic data).

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:183916 CAPLUS

DOCUMENT NUMBER: 122:56842

ORIGINAL REFERENCE NO.: 122:11017a,11020a

TITLE: Preparation of novel poly(ethylene or propylene glycol)-containing polymers as flow-stable support for solid phase synthesis

INVENTOR(S): Meldal, Morten P.

PATENT ASSIGNEE(S): Carlsberg A/S, Den.

SOURCE: U.S., 12 pp. Cont.-in-part of U.S. Ser. No. 835,277 abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5352756	A	19941004	US 1993-75758	19930611
AT 152143	T	19970515	AT 1993-903869	19930212
ES 2101300	T3	19970701	ES 1993-903869	19930212
PRIORITY APPLN. INFO.:			US 1992-835277 B2	19920213

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Highly polar, crosslinked title polymers, useful as chromatog. resins or solid supports for the synthesis of peptides, oligonucleotides or oligosaccharides, or for immobilization of proteins, are formed by radical copolymn. of an acrylic amide, nitrile or ester with poly(ethylene or propylene) glycol α,ω-substituted with acryloylalkyl, acryloylaryl, acrylamidoalkyl and acrylamidoaryl group. When used as solid supports or immobilization substrates, the polymers will incorporate a spacer comprising functional groups for the attachment of peptides, proteins, nucleotides or saccharides, e.g. those selected from (alkyl)amino, hydroxy, carboxyl, mercapto, sulfeno, sulfino, sulfo and derivs. thereof. A title polymer was prepared from α,ω-bisacrylamide of an ethylene oxide-propylene oxide copolymer bis(2-aminopropyl) ether (Jeffamine ED 2001), monoacrylamide of a polypropylene glycol bis(aminopropyl) ether (Jeffamine D 400), and N,N-dimethylacrylamide, and its title use was demonstrated in the preparation of an oligopeptide.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:428589 CAPLUS
DOCUMENT NUMBER: 121:28589
ORIGINAL REFERENCE NO.: 121:5149a,5152a
TITLE: Derivatized organic solid support for nucleic acid synthesis
INVENTOR(S): Reddy, Parameswara M.; Michael, Maged A.
PATENT ASSIGNEE(S): Beckman Instruments, Inc., USA
SOURCE: PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9401446	A2	19940120	WO 1993-US6214	19930629
WO 9401446	A3	19940303		
W: JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.:			US 1992-910223 A	19920709

AB Novel particulate supports useful for solid-phase oligonucleotide synthesis are based on a porous polymer based on a substituted acrylate or methacrylate moieties with a nucleoside linked to it by a spacer arm ≥3 C atoms long. The linker can be a substituted aliphatic diamine and may include a polyethylene glycol moiety. Preferably, the porous polymer is a methacrylate-vinylidene polymer. The solid-phase support can be used for oligodeoxyribonucleotide synthesis by either the phosphite-triester or the phosphotriester processes. Fractogel®-65F 10 g in dry acetonitrile 100 mL was incubated with carbonyldiimidazole

16.2 g at room temperature for 4 h and after washing with acetonitrile and drying, the crosslinked material was resuspended in dichloromethane 100 mL. The resuspended material was incubated with 1,12-diaminodecane 20 g at room temperature overnight and unreacted groups blocked with isopropylamine before washing and drying to give beads with an amino group content of 300-400 μmole/g. The support was then coupled with 5'-dimethoxytrityl succinates of nucleosides to give 28.1-36.50 μmole nucleoside/g. These supports were used succesfully for the synthesis of oligonucleotides in com. oligonucleotide synthesizers.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:247733 CAPLUS

DOCUMENT NUMBER: 114:247733

ORIGINAL REFERENCE NO.: 114:41853a,41856a

TITLE: Synthesis of thioredoxin partial sequences on a polyethyleneglycol-grafted polystyrene support with a photolytically detachable 2-nitrobenzyl anchoring group

AUTHOR(S): Pillai, V. N. Rajasekharan; Renil, M.; Haridasan, V. K.

CORPORATE SOURCE: Sch. Chem. Sci., Mahatma Gandhi Univ., Kottayam, 686 631, India

SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1991), 30B(2), 205-12
CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A crosslinked polystyrene-polyethyleneglycol graft copolymer with a 2-nitrobenzyl anchoring group has been prepared and used as a solid support for the stepwise synthesis of partial peptide sequences corresponding to thioredoxin (38-58), viz H-Leu-Thr-Val-Ala-Lys-Leu-OH (53-58), H-Tyr-Gln-Gly-Lys-OH (49-52) and H-Ile-Ala-Pro-Ile-Leu-Asp-Glu-Ile-Ala-Asp-Glu-OH (38-48). The terminal hydroxyl group of polyethyleneglycol grafted onto the crosslinked polystyrene resin is converted into the amino group which in turn is derivatized with the 2-nitrobenzyl anchoring system. The coupling and the deprotection steps in this synthetic scheme proceed in near quant. yields supporting the pos. role of the hydrophilic polyethyleneglycol spacer in facilitating the synthetic reactions.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1978:502932 CAPLUS

DOCUMENT NUMBER: 89:102932

ORIGINAL REFERENCE NO.: 89:15747a,15750a

TITLE: Solid phase degradations on macroporous polystyrene derivatives with identification of thiazolinones as PTC amino acid methylamides

AUTHOR(S): Appella, Ettore; Inman, John K.; Dubois, Garrett C.

CORPORATE SOURCE: Natl. Cancer Inst., NIH, Bethesda, MD, USA

SOURCE: INSERM Symposium (1977), 5(Solid Phase Methods Protein Sequence Anal.), 121-33
CODEN: INSSDM; ISSN: 0378-0546

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Derivs. of macroporous polystyrene were used as supports for solid

-phase peptide sequencing. Attachment yields for these resins were comparable to those obtained with other known supports. The effect of the type and length of the spacer arm separating the resin matrix and the peptide was investigated. 2-Aminoethylthio-polyethylene glycol-methylaminomethyl (AET-PEG-MAM) polystyrene, containing a long polyether spacer arm, gave exceptionally clean thiazolinones which were converted to phenylthiohydantoins (PTHs) or to phenylthiocarbamyl (PTC) amino acid methylamides. The PTC methylamide derivs. can be easily identified by thin-layer chromatog. or high-pressure liquid chromatog. In addition, PTC methylamide derivs. were more rapidly formed and were more stable than the corresponding PTH derivs. Consequently, the identification of both serine and threonine can be greatly improved.